In the Claims

1. (previously presented) A gas-liquid inertial separator, comprising

a) an elbow having an internal wall;

b) a fishbone separation enhancer, comprising

b)i) a plurality of longitudinally extending vanes positioned across the direction of gas flow and spaced apart along the direction of gas flow; and

b)ii) optionally, a central spine to which said vanes are attached,

wherein the vanes are oriented downwards in their longitudinal direction with respect to gravity such that liquid collected from liquid-containing gas flowing through said elbow runs downwards to at least one collection site.

2. (original) The separator of claim 1, wherein said vanes are of hollow construction and have at least one opening along a length thereof.

3. (original) The separator of claim 2, wherein said opening is along the entire length of the vane, said vane positioned such that the opening faces the direction of flow of gas flowing through said elbow.

4. (original) The separator of claim 1, wherein said vanes are mounted on struts which extend from said spine, or from said elbow.

5. (original) The separator of claim 1, wherein said vanes have a cross-section having a height greater than a thickness, said vanes mounted such that an axis through the height of the cross-section is angled from the direction of gas flow by from 20° to about 90°.

6. (original) The separator of claim 5, wherein said vanes are hollow and have an opening along a length thereof, said opening facing the direction of gas flow,

the opening located such that the hollow vane has a fluid collecting lip located at the bottom thereof.

7. (original) The separator of claim 1, wherein a spine is present, and said vanes slope downward from said spine and terminate proximate an internal wall of said elbow.

8. (original) The separator of claim 1, wherein a spine is present, said vanes slope downward towards said spine, said spine is hollow to provide a downward fluid flow path, and holes in said spine communicate with said vanes to provide a path for fluid collected by said vanes to enter said spine.

9. (currently amended) The separator of claim 1, wherein said vanes are mounted on struts and are hollow, have an opening along the length thereof, and are slidably attachable over said strut.

10. (original) The separator of claim 1 wherein said spine is a metal spine having a width of about one half or less of the internal diameter of said elbow.

11. (currently amended) The separator of claim ~~11~~ 1, wherein said spine is oriented vertically in said elbow when the inlet to the elbow is in a horizontal plane.

12. (original) The separator of claim 1, wherein said elbow has a circular cross section.

13. (currently amended) The ~~elbow~~ separator of claim 1, wherein said elbow has a polygonal cross section.

14. Canceled.

15. (original) The separator of claim 1, said separator having a spine, said spine floatingly positioned within said elbow.

16. (original) The separator of claim 1, wherein a bottom end of said spine is located within said elbow by a first retainer fixed to a wall of said elbow, and wherein a top portion of said spine is located within said elbow by a link moveably connected to an upper retainer fixed to a wall of said elbow and moveably connected to said top portion of said spine.

17. (original) The separator of claim 16, wherein said link is a unitary link rotatably connected to said upper retainer and rotatably connected to said top portion of said spine.

18. (original) A process for the separation of droplets of liquid from a flowing gas stream, comprising directing said gas stream into a separator of claim 1, collecting liquid by contact of said droplets with said fishbone separation enhancer and walls of said elbow, and providing an exit gas stream which is depleted of liquid droplets.

19. (currently amended) The process of claim ~~16~~ 18, wherein an inlet end of said elbow is in fluid communication with a process vessel which emanates a stream of liquid droplet-containing gas into said elbow, and collected liquid is directed back into said vessel from said separator.

20. (currently amended) The process of claim ~~16~~ 18, wherein said vessel is a polymerization reactor, and said liquid droplets comprise at least one of liquid monomers or oligomers.

21. (currently amended) A gas-liquid inertial separator, comprising

a) an enclosed elbow having an internal wall;

b) a fishbone separation enhancer, comprising

b)i) a plurality of longitudinally extending vanes positioned across the direction of gas flow and spaced apart along the direction of gas flow; and

b)ii) ~~optionally, a central spine to which said vanes are attached,~~ said vanes being attached to a central spine or to said internal wall of the enclosed elbow,

wherein the vanes are oriented downwards in their longitudinal direction with respect to gravity such that liquid collected from liquid-containing gas flowing through said elbow runs downwards to at least one collection site.

22. (previously presented) The separator of claim 21, wherein said vanes are of hollow construction and have at least one opening along a length thereof.

23, (previously presented) The separator of claim 22, wherein said opening is along the entire length of the vane, said vane positioned such that the opening faces the direction of flow of gas flowing through said elbow.

24. (previously presented) The separator of claim 21, wherein a spine is present and said vanes are mounted on struts which extend from said spine, or from said elbow.

25. (previously presented) The separator of claim 21, wherein said vanes have a cross-section having a height greater than a thickness, said vanes mounted such that an axis through the height of the cross-section is angled from the direction of gas flow by from 20° to about 90°.

26. (previously presented) The separator of claim 25, wherein said vanes are hollow and have an opening along a length thereof, said opening facing the direction of gas flow, the opening located such that the hollow vane has a fluid collecting lip located at the bottom thereof.

27. (previously presented) The separator of claim 21, wherein a spine is present, and said vanes slope downward from said spine and terminate proximate an internal wall of said elbow.

28. (previously presented) The separator of claim 21, wherein a spine is present, said vanes slope downward towards said spine, said spine is hollow to provide a downward fluid flow path, and holes in said spine communicate with said vanes to provide a path for fluid collected by said vanes to enter said spine.

29. (currently amended) The separator of claim 21, wherein said vanes are mounted on struts and are hollow, have an opening along the length thereof, and are slidably attachable over said strut.

30. (previously presented) The separator of claim 21 wherein a spine is present and said spine is a metal spine having a width of about one half or less of the internal diameter of said elbow.

31. (currently amended) The separator of claim ~~31~~ 21, wherein a spine is present and said spine is oriented vertically in said elbow when the inlet to the elbow is in a horizontal plane.

32. (previously presented) The separator of claim 21, wherein said elbow has a circular cross section.

33. (previously presented) The elbow of claim 21, wherein said elbow has a polygonal cross section.

34. (previously presented) The elbow of claim 21, wherein no spine is present, and wherein said vanes are each fixed to at least one interior wall of said elbow.

35. (previously presented) The separator of claim 21, said separator having a spine, said spine floatingly positioned within said elbow.

36. (previously presented) The separator of claim 21, wherein a spine is present having a bottom end of said spine is located within said elbow by a first retainer

fixed to a wall of said elbow, and wherein a top portion of said spine is located within said elbow by a link moveably connected to an upper retainer fixed to a wall of said elbow and moveably connected to said top portion of said spine.

37. (previously presented) The separator of claim 36, wherein said link is a unitary link rotatably connected to said upper retainer and rotatably connected to said top portion of said spine.

38. (previously presented) A process for the separation of droplets of liquid from a flowing gas stream, comprising directing said gas stream into a separator of claim 21, collecting liquid by contact of said droplets with said fishbone separation enhancer and walls of said elbow, and providing an exit gas stream which is depleted of liquid droplets.

39. (currently amended) The process of claim ~~36~~ 38, wherein an inlet end of said elbow is in fluid communication with a process vessel which emanates a stream of liquid droplet-containing gas into said elbow, and collected liquid is directed back into said vessel from said separator.

40. (currently amended) A process ~~of~~ for the separation of droplets of liquid from a flowing gas stream, comprising directing the flowing gas stream into a pipe elbow ~~separator~~ containing a plurality of longitudinally extending vanes directed angularly downwards with respect to gravity positioned across the direction of gas flow and spaced apart along the direction of gas flow having fluid collection lips located at the bottom of the vanes and collecting liquid by contacting said droplets with the vanes.

41. (currently amended) The process of claim 40, wherein said ~~separator~~ elbow is in fluid communication with ~~comprises~~ a polymerization reactor.

42. (previously presented) The process of claim 41, wherein said liquid droplets comprise at least one liquid monomer or oligomer.

43. (currently amended) The process of claim 40, wherein the elbow has an inlet in fluid communication with a process vessel which emanates a stream of liquid droplet containing gas into said elbow, ~~a collective~~ and collected liquid is directed back into said vessel from said separator.

44. (previously presented) The process of claim 43, wherein said vessel is a polymerization reactor, and said liquid droplets comprise at least one of liquid monomers or oligomers.